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1	onic comp cm	56 800 02
S-E-C-R-E-T	ODIG GLASS _ 3 PARES	v 26/9 agras ma 10-8
Service Contract		
Work Order Requests	<b>/</b>	
		8-075
	Date:	21 April 1958
TO : Chief, Research and Development Branch, O	C-E	
FROM: Chief, ELINT Activities Branch, OC-SP		
1. Description of work requested: Fabrication	of thirty (30) eacl	n, highly stable
1000 cycle reference oscillators. The units	should be complete	ely transistorized,
and use a high precision tuning fork as the	frequency determin	ing element. The
oscillators should be battery-operated by ei		_
	•	moreary cert and
should have a feature to permit remote opera	tion.	
2. List drawings, sketches, or samples accompar	wing requests:	
a. Electrical and mechanical specifications	V Lorden	25X1
b. Wiring diagram (electronics)		
c. Mechanical drawings and parts list d. Sample oscillator		
These items are available at 1414 Curie		
Hall.	Requested by	Chief, SP/EA
Contractor's Price estimate 1162900		25X1
19 august 58		_
Contractor's Delivery estimatedays after	er receipt of order	7.
Est	timate accepted by	_
Work Order No. 2 1ssued		
Contractor		nation, please contact
002.03.00000	11	14 Curie Hall
S-E-C-R-E-T		25X1

Addressee: 1 copy only

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#### Electrical Specifications - 1 kcs. Reference Oscillator:

- 1. Power Source: Z cell or mercury cell RM-5012R
- 2. Battery Polarity: Notapplicable
- 3. Output Impedance: 2000 ohms
- 4. Stability: 1 part in 10,000 over specified temperature range
- 5. Output level: 35 mv. across 2,000 ohms (earphone)
  100 mv. across 5,000 to 100,000 ohms (recorder)
- 6. Temperature Range: -400 to +400 C.
- 7. Warm-up Time: 45 seconds
- 8. Local Controls: Power on/off switch Output push button
- 9. Remote Controls: Power on/off (not furnished) Output push button Remote battery

#### Physical Specifications:

- 1. Dimensions (overall)

  Length 4-5/16 in.

  Width 2-1/4 in.

  Height 1-1/32 in.
- 2. Weight 14 oz. including battery

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#### FABRICATION OF A 1000 CYCLE REFERENCE OSCILLATOR

#### I. Requirements

1. General. This requirement demands a highly stable 1000 cycle reference oscillator. The units shall be completely transistorized, and use a precision tuning fork as the frequency determing element. The oscillators shall be battery operated by either a dry cell or mercury cell and should have a feature to permit remote operation.

#### 2. Electrical.

- a. Power source: Z cell or RM-5002R mercury cell.
- b. Battery polarity: none
- c. Output impedance: 2000 ohms.
- d. Stability: 1 part in 10,000 over the

specified temperature range.

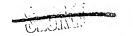
- e. Output level: 35 mv across 2,000 ohms (earphones)

  100 mv across 5000 to 100,000

  ohms (recorder).
- f. Temperature range: -40 degrees to 740 degrees centigrade.
- g. Warm up time: 45 seconds.
- h. Local controls: Pow er on/off switch

Output - push button.

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#### 3. Physical.

a. Dimensions: Length, 4-5/16"

Width, 2-1/4"

Height, 1-1/32"

b. Weight: 14 oz., including battery.

#### II. Deliverable items.

A quantity of thirty (30) reference oscillators shall be fabricated. If necessary, a revised parts list will be submitted to the customer.

#### III. Government Furnished Equipment.

- a. Electrical and mechanical specifications.
- b. Schematic diagrams.

Mechanical drawings and parts list.

d. Sample os cillator.

IV. Instructions to the Contractor.

The contractor will submit a letter of proposal to the customer including a cost breakdown estimate and delivery date (preferably, on or by 30 June 1958). This equipment is UNCLASSIFIED, however, its association with the contract or the contracting organization is classified SECRET.

